X Krystal Klear®

Chelated Micronutrients

- Excellent in Tank-Mixes
- Effective in a wide range of pH
- Formulated with LidoQuest® IDS-40



Performance Nutrition is a division of LidoChem, Inc.

Patented Technology

AT WORK FOR YOU!

Krystal Klear "Dual-Chelation" delivers results.

KRYSTAL KLEAR IS GREEN!

Krystal Klear patented chelated micronutrient solutions are formulated with biodegradable LidoQuest® IDS-40.

LidoQuest® IDS-40 biodegrades within 72 hours....unlike others that persist in the soil and can mobilize heavy metals into water supplies.

 LidoQuest® IDS-40 is a very effective chelating agent. This enables Krystal Klear micronutrients to work at much lower rates than many competitive products, and reduces the volume of chemical inputs entering the ecosystem.

Krystal Klear patented chelated micronutrient solutions are unique in composition, versatility and performance.

Krystal Klear patented chelated micronutrient solutions are stable in solutions and soils in a wide range of pH. They are very effective at pH's normally encountered (5 - 8).

Krystal Klear patented chelated micronutrient solutions are orthophosphate and polyphosphate compatible so they can be applied with water-soluble fertilizers.

Krystal Klear patented chelated micronutrient solutions offer exceptional tank-mix compatibility with other fertilizers and pesticides, saving time and costs of making separate applications.

Krystal Klear patented chelated micronutrients are more available than other chelated metals so they provide quick deficiency corrections. Krystal Klear patented chelated micronutrient solutions have a low affinity for calcium so they will not induce calcium deficiencies.

Krystal Klear patented chelated micronutrient solutions are ideal for use in fertility programs for crops grown from RoundUp $^{\text{TM}}$ Ready seeds.

KRYSTAL KLEAR IS VERSATILE!

- Blends easily with fertilizer solutions and pesticide tank mixes.
- Compatible with ortho- and poly- phosphates.
- Effective in water & soil pH of 3 through 11.
- Suitable for soil, foliar and hydroponic applications.



KRYSTAL KLEAR CONTAINS M.E.A. as a surfactant, and more

M.E.A. is a natural substance found in all living organisms.
Also a surfactant, M.E.A. gently penetrates the cuticle of the leaf and accelerates nutrient uptake through the leaf.

M.E.A. compounds are part of the Systemic Acquired Resistance pathway in plants.

M.E.A. is part of the pathogen recognition response, and, helps regulate lesion formation (which naturally occurs when a plant is trying to contain infection in cells)



THE Krystal Klear DIFFERENCE

Krystal Klear patented chelated micronutrient solutions are custom formulated utilizing a "dual-chelation" system to maximize the strengths of both EDTA and LidoQuest IDS-40.

As a result, Krystal Klear patented chelated micronutrient solutions are stable in the jug, effective at lower rates, offer excellent tank mix capabilities and deliver optimal nutrient uptake.

Micronutrients are essential

for your growing needs.

Supply micronutrients when needed, as needed!

Boron

Boron helps in cell synthesis—important for plant growth.

Boron mediates lignification – important in self-defense against pathogens and injury.

Boron mediates Phenol Metabolism.

Manganese

Manganese activates enzymes for amino acid production.

Manganese protects against free radicals.

Manganese activates enzymes for hormone production.

Copper

Copper is essential for growth and activates many enzymes.

Copper detoxifies free radicals produced in photosynthesis.

Iron

Iron is essential for the synthesis of chlorophyll.

Iron enhances disease resistance in plants.

Zinc

Zinc is essential for maintenance of protein synthesis.

Zinc is needed for the synthesis of auxin.

Zinc is required for membrane integrity.



Krystal Klear B

Krystal Klear B is a patented chelated micronutrient solution containing 5% B.

Turf: Apply 0.75 to 1.50 ounces per 1,000 ft2 (1 - 2 quarts per acre) each spray.

Krystal Klear B can be incorporated into the normal spray program.

Start applications in early spring, and repeat every 14-21 days.

The above amount can be split into several applications. Split applications are more beneficial than a single application.

WARNING: Some crops may be injured by the application of Boron. Contact your county agent or field representative before making application.

Krystal Klear Cu

Krystal Klear Cu is a patented chelated micronutri¬ent solution containing 5% Cu.

Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Klear Cu can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young. This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount can be split into several applications. Split applications are more beneficial than a single application.

Krystal Klear Fe

Krystal Klear Fe is a patented chelated micronutri¬ent solution containing 4% Fe.

Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Klear Fe can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young. This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount can be split into several applications. Split applications are more beneficial than a single application.



Krystal Klear Mn

Krystal Klear Mn is a patented chelated micronutri¬ent solution containing 5% Mn.

Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Klear Mn can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young.

This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount can be split into several applications. Split applications are more beneficial than a single application.

Krystal Klear Zn

Krystal Klear Zn is a patented chelated micronutri¬ent solution containing 9% Zn.

Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Zn can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young.

This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount can be split into several applications. Split applications are more beneficial than a single application.



Krystal Klear

Agra Mix patented chelated micronutri-ents solution containing 2% Cu, 2% Mn, 2% Zn and 0.5% B.

Agra Mix II patented chelated micronutri-ents solution containing 2% B, 2% Mn, 2% Zn and 0.5% Cu.

Agra Mix III patented chelated micronutri-ents solution containing 2% B, 0.5% Cu, 0.25% Fe, 2% Mn and 2% Zn.

Vegetables: Apply 1/2 to 1 quart per acre each spray. Krystal Klear Agra Mix can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young. This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount can be split into several applications. Split applications are more beneficial than a single application.

WARNING: Some crops may be injured by the application of Boron. Contact your county agent or field representative before making application.



Crop Mix patented chelated micronutrients solution containing 4% Zn, 1% Mn, 0.5% Cu and 0.1% B.

Crop Mix II patented chelated micronutrients solution containing 0.1% B, 0.5% Cu, 0.25% Fe, 1% Mn and 4% Zn

Vegetables: Apply 1/2 to 1 quart per acre each spray.

Krystal Klear Crop Mix can be incorporated into the normal spray program.

Field Crops: Apply 1 quart per acre when plants are young. This is the time when the most severe deficiencies occur.

Tree & Vine Crops: Apply 1 quart per 125 gallons of spray mixture. If concentrated spray is used, increase the concentration in direct proportion to the dilution.

The above amount may be split into several applications. Split applications are more beneficial than a single application.

WARNING: Some crops may be injured by the application of Boron. Contact your county agent or field representative before making application.

Krystal Klear® patented Chelated Micronutrient Solutions Soil and Aerial Application Information

Soil Applications: Krystal Klear patented chelated micronutrient solutions are recommended for use on all types of soils. Dilute before use to ensure uniform coverage. The product can be incorporated into liquid fertilizers or applied separately. Soil applications may be made by drip, sprinkler or band application.

Soil Application Rates

If you do not have a soil or leaf analysis then apply at the following rates

Maintenance Application 1 quart per acre

Moderate Deficiency Rate 2-3 quarts per acre

High Deficiency Rate 4 quarts per acre

* Krystal Klear Cu

Maintenance Application - 8 ounces per acre. Moderate Deficiency - 16 ounces per acre. Heavy Deficiency - 24 ounces per acre.

Aerial Applications: Consult your local agronomist for aerial application rates and dilutions



General Mixing Instructions

Tank Mixes: Do not mix with pesticides or other chemicals without a compatibility test. An adequate test for compatibility involves mixing in a small container the proper proportions of the product with water and the other ingredients. Agitate and let stand for one hour. If a precipitate forms, then apply the product separately.

Krystal Klear patented chelated micronutrient solutions will disperse in water with little or no agitation. Many pesticides can be applied with Krystal Klear. Follow this mixing sequence: Water, Krystal Klear and pesticide.

Tank Buffering: Water with a pH greater than 6 may diminish pesticide efficacy by way of alkaline hydrolysis. Nutrol®, a registered buffer, may be used to lower and maintain the pH of a spray tank and improve application efficacy.



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